

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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|-------------------|--------------------|---|------------|----------------|
| In re Applicants: | Christian Koeniger | § | Art Unit: | 2855 |
| | | § | | |
| Serial No.: | 10/520,960 | § | Conf. No.: | 4786 |
| | | § | | |
| Filed: | February 3, 2006 | § | Examiner: | Mirellys Jagan |
| | | § | | |
| Title: | Subsea And Landing | § | Docket No. | 101.0005US/PCT |
| | String Distributed | § | | (SHL.0308US) |
| | Temperature Sensor | § | | |
| | System | § | | |

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

REPLY TO OFFICE ACTION DATED DECEMBER 9, 2009

Dear Sir:

Please consider the comments in the following REMARKS section.

Date of Deposit: February 9, 2010

I hereby certify that this correspondence is being transmitted electronically to the U.S. Patent Office on the date indicated above.


Janice Muñoz

REMARKS

In a Final Office Action mailed on December 9, 2009, claims 1-5, 8-10, 17, 28, 30, 31, 36, 57, 59 and 60 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Davidson in view of Smith; and objections were made to claims 18-21 as being dependent upon a base claim but were indicated as being allowable if rewritten in independent form.

To make a determination under 35 U.S.C. § 103, several basic factual inquiries must be performed, including determining the scope and content of the prior art, and ascertaining the differences between the prior art and the claims at issue. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 U.S.P.Q. 459 (1965). Moreover, as the U.S. Supreme Court held, it is important to identify a reason that would have prompted a person of ordinary skill in the art to combine reference teachings in the manner that the claimed invention does. *KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 U.S.P.Q.2d 1385 (2007).

The Final Office Action states that Smith discloses a fiber optic line that extends above the sea bottom such that the line is adapted to sense a parameter of various points above the sea bottom. Final Office Action, p. 5. In the response to Applicant's arguments, the Examiner appears to contend that this fiber optic line is labeled by the identifier "D" in Fig. 3 of Smith. Final Office Action, p. 5.

Applicant respectfully submits that Smith fails to disclose a distributed sensor system that is adapted to sense a parameter at various points along an interval from a platform toward and ocean bottom. Fig. 3 of Smith merely refers to the relatively large diameter (labeled by "D" in Fig. 3) of the conduit 16. *See, for example*, Smith, 8:27-30. Smith explains that due to this relatively large diameter, tools may be easily pumped down the annulus of conduit 16. Smith, 8:30-34. Smith fails to address the optical fiber or apparently even illustrate it in Fig. 3.

Instead, Smith only discloses the use of an optical fiber downhole in the wellbore beneath a wellhead 9. Smith discloses that the optical fiber 17 may be installed in its well as follows:

Optical fibers may be inserted in the alternative path conduit by connecting a pump to the provided port on the instrument pod 17. Silicon gel or another fluid can be pumped into the annulus of the alternative path conduit and fiber optic cabling is fed into the pumping silicon gel (or other fluid) which carries the line into the well bore due to the frictional force of the silicon (or other fluid) against the fiber optic line. Upon reaching total depth, the pumped fiber is fully deployed in the wellbore. Fluids that may be used for deployment include liquids such as water as well as gases, such as air or nitrogen.

Smith, 7:38-48. The skilled artisan in possession of Smith would not have been apprised, however, of an arrangement in which a distributed sensor system senses a parameter at various points along an interval between an ocean bottom and platform. Instead, the skilled artisan in possession of Smith would only have gleaned using an optical fiber downhole in the well beneath the sea floor.

The Examiner contends that the § 103 rejection is based on the modification of Davidson in view of Smith. Final Office Action, p. 6. As discussed above, Smith fails to disclose the distributed temperature sensor system of claim 1; and the Examiner fails to set forth any plausible reason to explain why the skilled artisan would have otherwise modified Smith or Davidson to incorporate a distributed temperature sensor that is adapted to sense a parameter at various points along an interval from a platform toward the ocean bottom. Therefore, the § 103 rejection of claim 1 is deficient, as the Final Office Action fails to, whether by evidence or reason, explain why the skilled artisan would have combined the elements of the prior art in the same manner that the claimed invention does, contrary to the standard that is set forth in *KSR*.

Thus, in view of the foregoing, Applicant respectfully requests withdrawal of the § 103 rejection of claim 1.

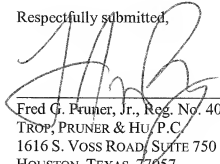
For similar reasons, Applicant respectfully submits that the § 103 rejection of claim 28 is deficient, as the Final Office Action fails to set forth any evidence or plausible reason to explain why the skilled artisan in possession of Davidson and Smith would have derived deploying a line along at least part of a length of a landing string, where the act of deploying the line an interval of the landing string extending above the ocean bottom such that a distributed temperature sensor is adapted to sense a parameter at various points along the ocean bottom, absent impermissible hindsight gleaned from the current application.

Dependent claims 2-5, 8-10, 17, 30, 31, 36, 57, 59 and 60 are patentable for at least the same reasons as the claims from which they depend.

CONCLUSION

In view of the foregoing, Applicant respectfully requests withdrawal of the § 103 rejections and a favorable action in the form of a Notice of Allowance. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504 (SHL.0308US).

Respectfully submitted,



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Date: February 9, 2010